

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P301903

Luminaire Tested: **GLNA-AF-08-LED-E1-SL4-7030-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301903
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-08-LED-E1-SL4-7030-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27490.1 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

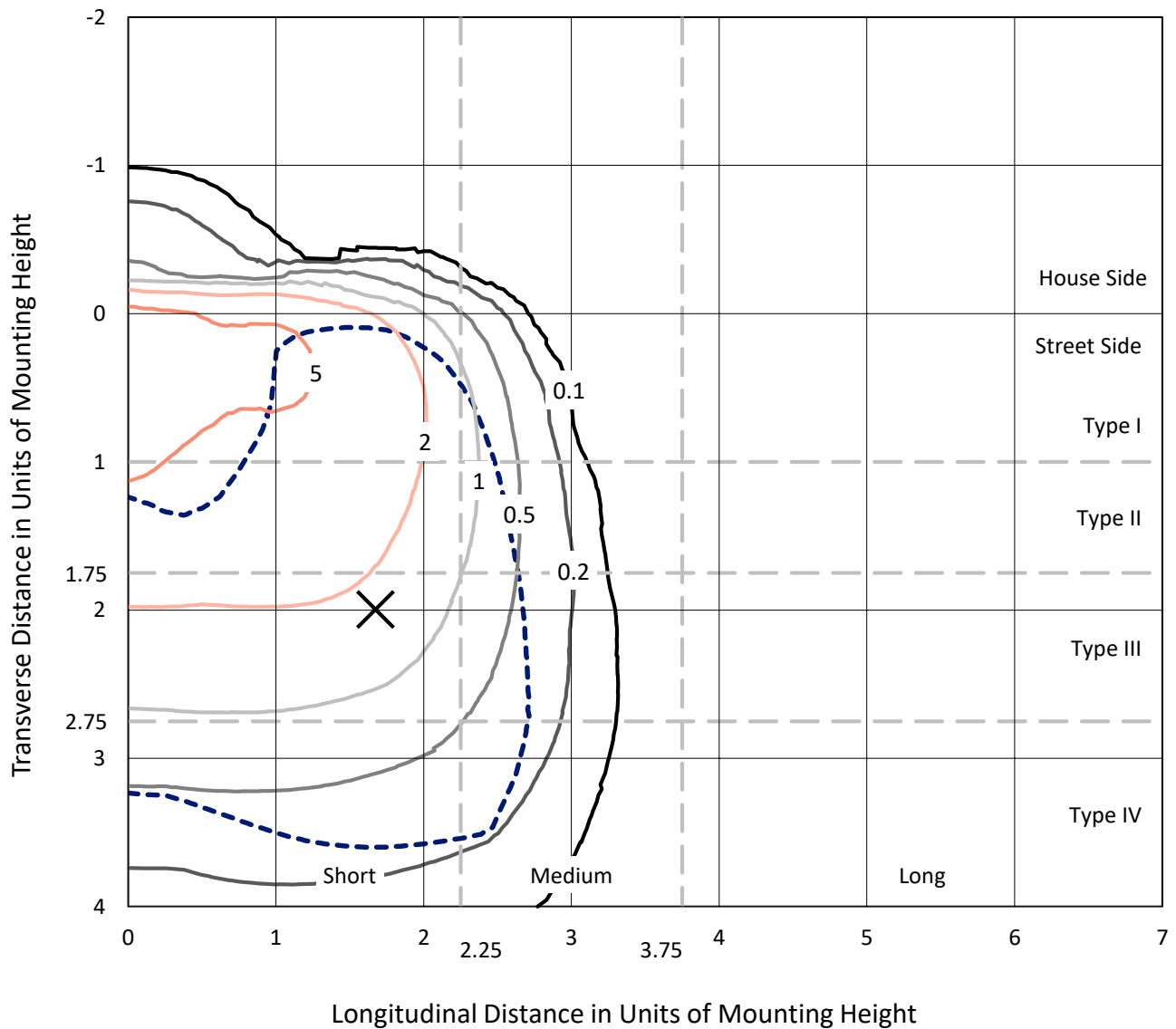


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

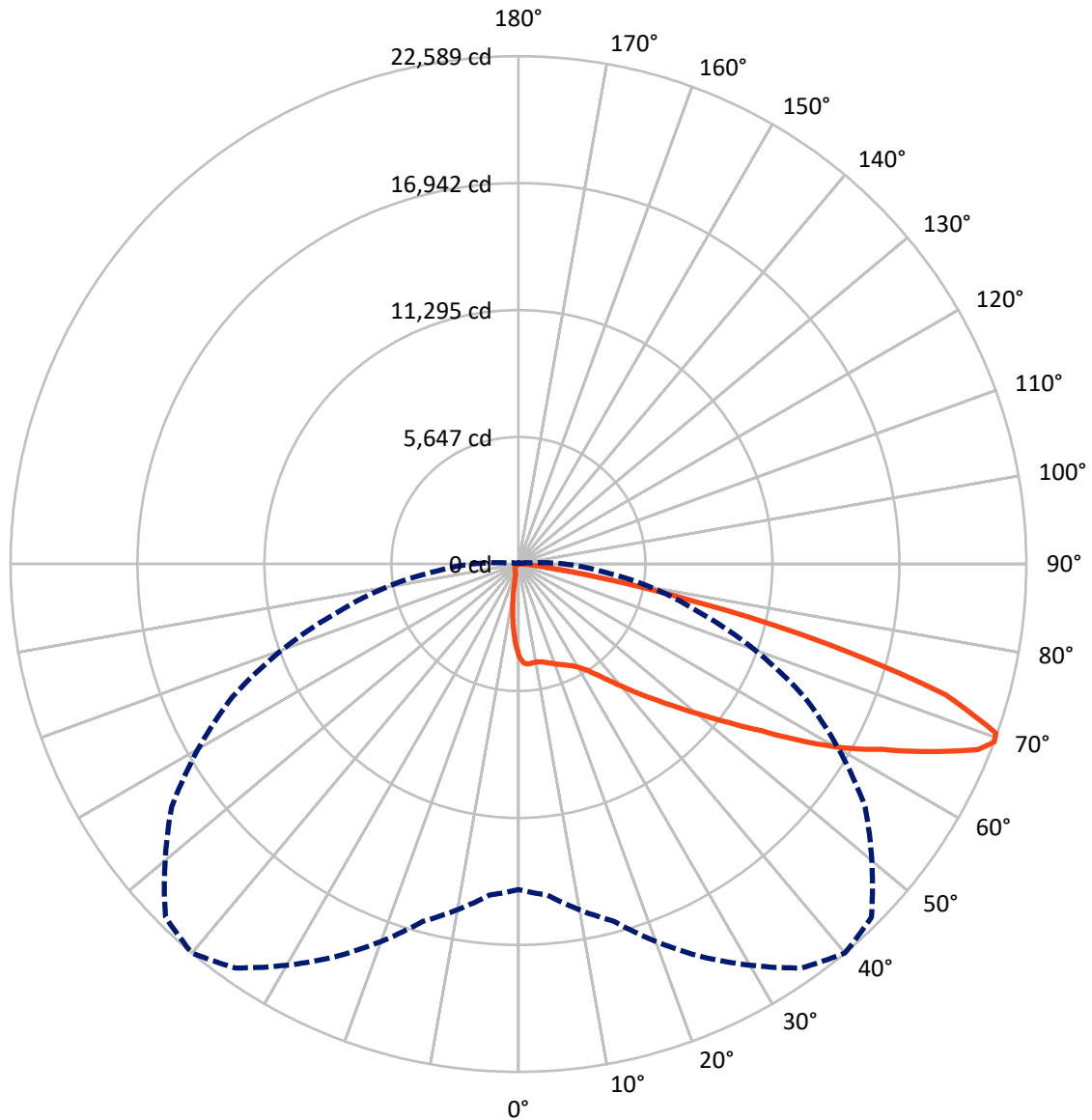


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1608.3	0.0	1608.3
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	25881.7	0.0	25881.7
	% Fixture	94.1	0.0	94.1
Total	Lumens	27490.1	0.0	27490.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.0	1.2
10°-20°	818.9	3.0
20°-30°	1379.4	5.0
30°-40°	2258.1	8.2
40°-50°	3909.8	14.2
50°-60°	6158.3	22.4
60°-70°	8042.4	29.3
70°-80°	4142.2	15.1
80°-90°	448.1	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	27490.1	100.0
0°-180°	27490.1	100.0



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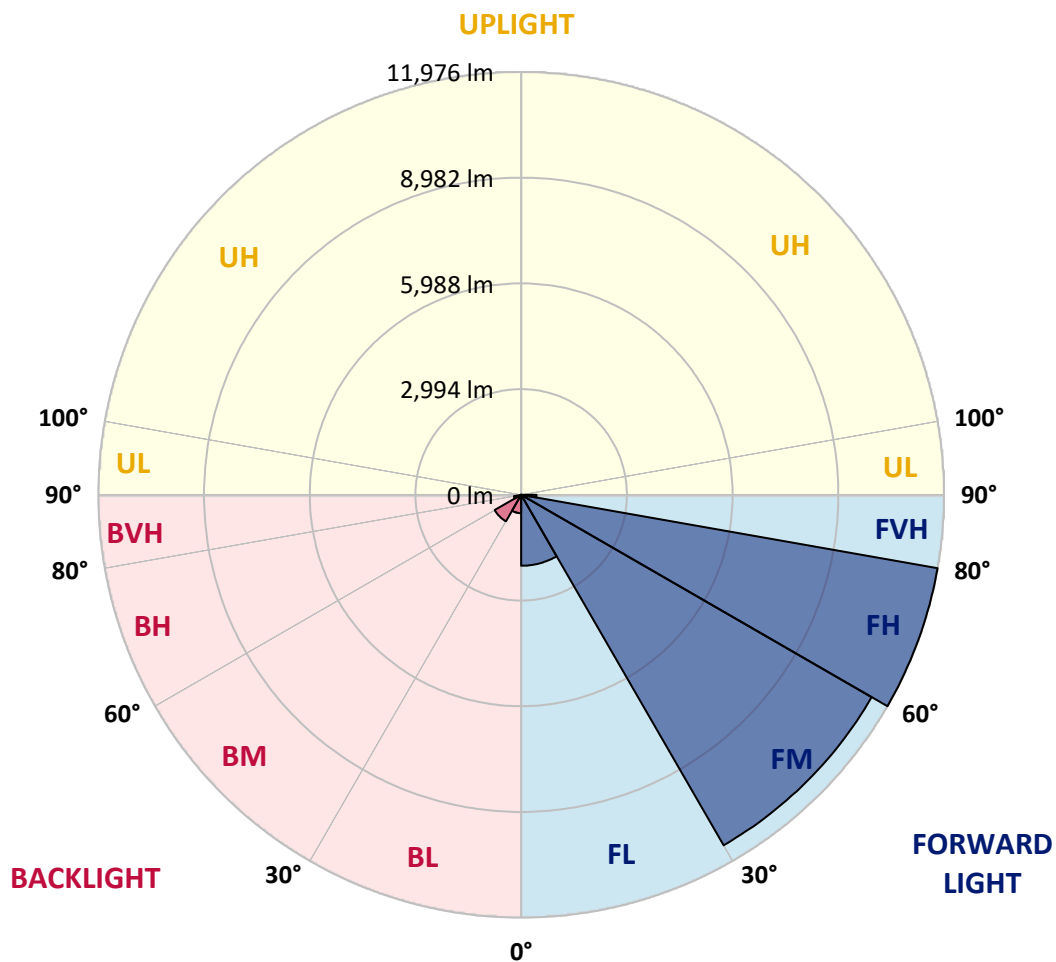
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2010.3	7.3			
FM	(30°-60°)	11461.6	41.7			
FH	(60°-80°)	11975.8	43.6			G4/12000
FVH	(80°-90°)	434.0	1.6			G3/500
BL	(0°-30°)	521.0	1.9	B2/1000		
BM	(30°-60°)	864.4	3.1	B1/1000		
BH	(60°-80°)	208.8	0.8	B1/500		G1/500
BVH	(80°-90°)	14.1	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2
2.5°	4509.7	4485.1	4470.4	4450.8	4426.2	4405.0	4396.8	4336.2	4279.0	4200.4	4110.4
5°	4593.1	4585.0	4558.8	4532.6	4503.1	4470.4	4452.4	4380.4	4298.6	4184.1	4027.0
7.5°	4601.3	4591.5	4558.8	4522.8	4481.9	4442.6	4411.5	4339.5	4264.2	4148.1	3956.6
10°	4588.2	4576.8	4552.2	4513.0	4462.2	4424.6	4393.5	4324.8	4261.0	4156.2	3943.5
12.5°	4573.5	4562.1	4550.6	4531.0	4486.8	4460.6	4434.4	4369.0	4311.7	4223.3	3991.0
15°	4588.2	4581.7	4594.8	4586.6	4562.1	4539.1	4513.0	4454.1	4401.7	4328.1	4077.7
17.5°	4650.4	4650.4	4691.3	4696.2	4673.3	4640.6	4603.0	4544.1	4499.9	4437.7	4180.8
20°	4796.0	4791.1	4843.5	4853.3	4797.7	4747.0	4691.3	4619.3	4585.0	4545.7	4282.2
22.5°	5046.4	5023.5	5054.6	5044.8	4935.1	4856.6	4787.9	4699.5	4681.5	4663.5	4395.1
25°	5372.0	5358.9	5380.2	5283.7	5090.6	4984.2	4902.4	4802.6	4802.6	4820.6	4522.8
27.5°	5844.9	5795.8	5723.8	5553.7	5264.0	5128.2	5039.9	4933.5	4961.3	5028.4	4691.3
30°	6329.3	6275.3	6110.0	5848.2	5475.1	5332.8	5229.7	5118.4	5183.9	5306.6	4917.1
32.5°	6807.1	6746.5	6512.5	6182.0	5777.8	5635.5	5535.7	5412.9	5522.6	5728.7	5247.7
35°	7270.2	7216.2	6946.2	6556.7	6180.4	6062.6	5970.9	5864.6	6005.3	6293.3	5714.0
37.5°	7790.5	7731.6	7402.7	6980.5	6669.6	6584.5	6517.5	6411.1	6656.5	7078.7	6363.6
40°	8430.3	8330.5	7887.0	7466.5	7235.8	7194.9	7149.1	7134.3	7515.6	8099.8	7229.3
42.5°	9163.4	8999.7	8394.3	7978.7	7857.6	7887.0	7875.6	7941.0	8590.7	9369.6	8283.0
45°	9896.4	9685.4	8958.8	8525.2	8541.6	8644.7	8708.5	8970.3	9937.4	10825.9	9417.0
47.5°	10518.2	10310.4	9500.5	9115.9	9312.3	9515.2	9688.6	10184.4	11321.7	12259.3	10299.0
50°	11050.1	10853.7	10074.8	9765.5	10207.3	10534.6	10816.1	11550.8	12810.7	13350.7	10917.5
52.5°	11485.3	11354.4	10670.4	10510.1	11230.0	11709.5	12121.8	13002.2	14129.6	14237.6	11398.6
55°	11909.1	11815.8	11310.2	11395.3	12431.1	13084.0	13606.0	14542.0	15265.2	14977.2	11860.0
57.5°	12396.7	12311.7	12040.0	12517.8	14010.1	14831.6	15401.0	15906.6	16265.0	15733.2	12295.3
60°	12894.2	12845.1	12851.6	13764.7	15823.2	16611.9	16926.1	17057.0	17246.8	16445.0	12319.8
62.5°	13368.7	13462.0	13779.4	15152.3	17559.3	18164.8	18323.5	18452.8	18230.2	16557.9	11382.2
65°	14172.1	14324.3	15081.9	17009.5	19468.9	20116.9	20280.5	19837.1	18385.7	15098.3	9258.3
67.5°	14564.9	14843.0	16194.6	18740.7	21321.2	22041.2	21980.7	19927.1	16499.0	11513.1	5941.5
69°	14483.0	14779.2	16451.5	19270.9	21936.5	22589.4	22204.8	18825.8	14056.0	8340.3	3647.4
70°	14159.1	14458.5	16319.0	19251.3	22015.0	22532.1	21789.2	17466.1	11884.6	6098.6	2281.0
72.5°	11824.0	12082.6	14488.0	17400.6	20280.5	19860.0	18228.6	12100.6	5790.9	1660.9	513.8
75°	7278.3	7422.3	10395.5	13108.5	15317.6	14237.6	12144.7	6020.0	1726.3	469.6	284.7
77.5°	3845.3	3910.8	5691.1	7726.7	9709.9	8034.3	6224.6	2348.1	795.3	294.5	206.2
80°	2272.8	2321.9	3064.8	3532.8	4202.1	3509.9	2488.8	1441.6	569.4	184.9	183.3
82.5°	1300.9	1332.0	2222.1	1963.6	1656.0	1413.8	1238.7	1366.3	342.0	124.4	189.8
85°	477.8	484.3	1250.1	1494.0	985.1	585.8	615.3	1132.3	91.6	78.5	148.9
87.5°	222.5	217.6	643.1	914.7	576.0	371.4	479.4	248.7	36.0	50.7	40.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2	4107.2
2.5°	4058.1	3997.5	3887.9	3775.0	3660.4	3572.1	3485.4	3416.6	3393.7	3351.2	3354.5
5°	3933.7	3822.4	3593.4	3361.0	3118.8	2919.2	2731.0	2578.8	2505.2	2429.9	2429.9
7.5°	3825.7	3663.7	3305.4	2927.4	2536.3	2207.4	1911.2	1688.7	1566.0	1467.8	1466.1
10°	3784.8	3565.5	3064.8	2523.2	1978.3	1530.0	1178.1	952.3	836.2	760.9	757.6
12.5°	3802.8	3531.2	2879.9	2150.1	1466.1	983.4	682.3	536.7	487.6	464.7	464.7
15°	3855.2	3521.4	2695.0	1785.2	1035.8	615.3	453.3	414.0	410.7	410.7	410.7
17.5°	3919.0	3524.6	2505.2	1430.1	705.3	440.2	391.1	386.2	389.4	389.4	389.4
20°	3984.4	3526.3	2300.7	1101.2	497.4	382.9	368.2	366.5	369.8	369.8	371.4
22.5°	4064.6	3534.4	2096.1	823.1	410.7	361.6	350.2	350.2	351.8	351.8	350.2
25°	4156.2	3550.8	1883.4	610.3	374.7	346.9	337.1	335.4	337.1	335.4	333.8
27.5°	4270.8	3573.7	1646.1	477.8	358.4	332.2	324.0	324.0	322.4	320.7	319.1
30°	4414.8	3599.9	1379.4	405.8	342.0	319.1	310.9	309.3	307.6	304.4	304.4
32.5°	4634.1	3657.2	1116.0	368.2	324.0	301.1	294.5	294.5	291.3	288.0	286.4
35°	4971.1	3770.1	880.3	345.3	304.4	281.4	273.3	273.3	270.0	268.4	266.7
37.5°	5437.5	3941.9	684.0	324.0	284.7	260.2	252.0	250.4	247.1	243.8	242.2
40°	6057.6	4154.6	538.3	304.4	265.1	238.9	232.4	229.1	222.5	217.6	217.6
42.5°	6836.5	4396.8	436.9	283.1	242.2	219.3	214.4	209.4	198.0	193.1	191.4
45°	7651.4	4614.4	369.8	258.5	219.3	199.6	196.4	188.2	173.4	168.5	168.5
47.5°	8238.9	4665.1	325.6	235.6	198.0	178.4	176.7	162.0	148.9	145.6	144.0
50°	8605.4	4565.3	289.6	212.7	178.4	158.7	153.8	135.8	127.6	124.4	122.7
52.5°	8852.5	4387.0	260.2	193.1	160.4	140.7	129.3	116.2	109.6	106.4	106.4
55°	9050.5	4135.0	230.7	175.1	145.6	126.0	109.6	99.8	93.3	90.0	90.0
57.5°	9106.1	3793.0	201.3	160.4	130.9	111.3	93.3	86.7	78.5	76.9	76.9
60°	8701.9	3176.1	178.4	142.4	117.8	96.5	81.8	73.6	65.5	63.8	62.2
62.5°	7636.7	2457.7	157.1	126.0	103.1	83.5	70.4	60.5	54.0	54.0	54.0
65°	5825.3	1647.8	137.5	109.6	90.0	70.4	60.5	49.1	45.8	45.8	47.5
67.5°	3487.0	896.7	117.8	93.3	76.9	58.9	50.7	42.5	40.9	42.5	42.5
69°	2043.8	526.9	106.4	83.5	67.1	52.4	44.2	37.6	40.9	42.5	42.5
70°	1261.6	355.1	98.2	75.3	60.5	47.5	40.9	36.0	39.3	40.9	40.9
72.5°	351.8	183.3	78.5	58.9	49.1	39.3	32.7	32.7	37.6	39.3	39.3
75°	229.1	135.8	60.5	44.2	37.6	31.1	27.8	31.1	36.0	37.6	37.6
77.5°	189.8	111.3	49.1	36.0	31.1	29.5	26.2	27.8	32.7	34.4	34.4
80°	173.4	78.5	39.3	32.7	27.8	26.2	24.5	22.9	29.5	31.1	31.1
82.5°	165.3	62.2	34.4	29.5	26.2	22.9	21.3	22.9	26.2	27.8	29.5
85°	103.1	40.9	31.1	27.8	22.9	21.3	21.3	21.3	24.5	26.2	26.2
87.5°	37.6	32.7	27.8	22.9	19.6	19.6	19.6	19.6	21.3	24.5	24.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)